Chapter 2 - Comment Documents LLNL SW/SPEIS

Coalition for a Safe Lab, Mary Wulff Page 4 of 4

12/35.01 should be halted on the portable BSL-3 facility. All plans to conduct advanced bio-warfare agent (BSL-3) research on site at LLNL should be terminated.

> 10. There are 108 buildings identified at LLNL as having potential seismic deficiencies relative to current codes. The SWEIS should include a complete list of these buildings and an accounting of the ones that house or may house hazardous, radiological and biological research materials. LLNL is located within 1 kilometer of two significant earthquake faults, including the Las Positas Fault Zone less than 200 feet from the LLNL boundary. How can we mitigate harm done from an earthquake that damages these buildings before they are brought up to code? We urge the Livermore Lab to stop any work with hazardous, radioactive or biological substances that may be occurring in any building that does not comply with federal standards.

14/22.01

11. A contractor will be paid to package and ship more than 1,000 drums of transuranic and mixed transuranic waste to the WIPP dump in New Mexico, yet the SWEIS says this is exempt from environmental review. This work in its entirety must be included in the review.

12. The DOE does not acknowledge in the SWEIS that the double-walled shipping containers described in the document may be replaced by less health

15/20.05

- protective single-lined containers. We believe that no waste should be shipped in single-walled containers and the SWEIS should provide a guarantee

13. The Purpose and Need statement in the SWEIS relies heavily upon the US Nuclear Posture Review, which calls for an aggressive modernization and manufacturing base within the US nuclear weapons complex. This stands in stark contrast to the binding legal mandate to shift "from developing and 16/01.01 producing new weapons designs to dismantling obsolete weapons and maintaining a smaller weapons arsenal". We believe a revised Purpose and Need statement should accurately reflect the Livermore Lab's legal responsibility with regard to US law, including US obligations under the nuclear Non-Proliferation Treaty (NPT).

> Further, the Purpose and Need statement in the SWEIS almost completely omits LLNL's important role in civilian science research. This omission fatally flaws the alternatives analysis in the SWEIS by neglecting to consider the expanded role that civilian science programs at the LLNL could play in the next

17/07.01

The alternatives analysis should be revised to consider LLNL's role in light of the commitments in the NPT and the Livermore Lab's civilian science mission as well as the compelling case for removing special nuclear materials (i.e., plutonium and highly enriched uranium) from the LLNL site.

Sincerely, Mary Wulff Coalition For a Safe Lab PO BOX 1803 Hamilton MT 59840

Committee to Minimize Toxic Waste, Pamela Sihvola, Co-Chair Page 1 of 10

Committee to Minimize Toxic Waste

May 25, 2004



Mr. Thomas Grim, L-293 U.S. Department of Energy, National Nuclear Security Administration Livermore Site Office, SWEIS Document Manager 7000 East Avenue Livermore, CA 94550-9234

Fax: (925) 422-1776 Email: tom.grim@oak.doe.gov

RE: Comments on the Department of Energy's Site-Wide Environmental Impact Statement for Continued Operations at Lawrence Livermore National Laboratory.

Dear Mr. Grim:

1/31.04

Through this letter we are expressing our deep concern with the health and environmental risks posed by the expanded nuclear weapons mission for the Lawrence Livermore National Laboratory (LLNL) into the indefinite future. We appreciate your focused attention in this matter. We have outlined a number of specific concerns below that, taken cumulatively, lead us to the conclusion that the SWEIS is so deficient in information and analysis that it should be re-circulated in draft form so that the community, the regulators, and the legislators will have an opportunity to evaluate the new information that is requested in these comments. Our specific concerns are outlined

- 1. The same day of the public hearings for the SWEIS, April 27, 2004, the Congressional Subcommittee on National Security, Emerging Threats, and International Relations for the Committee on Government Reform held a hearing on the security. The hearing highlighted potentially insurmountable problems with plutonium and highly enriched uranium at certain Department of Energy sites, with a focus on the vulnerability of nuclear materials storage at LLNL. On May 7, 2004, Energy Secretary Spencer Abraham delivered a speech on the deficiencies in the security of nuclear materials at LLNL and other DOE sites. The Energy Secretary made a commitment to consider removing the special nuclear materials at LLNL by 2005. This recent acknowledgement by the DOE that security at LLNL is questionable makes it imperative that the SWEIS evaluate an alternative that would remove all special nuclear materials from LLNL. These acknowledgements make this not only a reasonable option, but one that should be evaluated because it is a foreseeable outcome within the next decade at LLNL.
- 2. Instead of reducing the amount of special nuclear materials on-site at LLNL, this plan proposes to more than double the limit for plutonium at Livermore Lab from 1,540 pounds to 3,300 pounds. Additionally, under the Proposed Action, the administrative limit for highly enriched uranium in Building 239 would increase from 55 pounds to 110

2-76 March 2005

Committee to Minimize Toxic Waste, Pamela Sihyola, Co-Chair Page 2 of 10

pounds. Seven million people live in surrounding areas, and residences are built right up to the fence. Plutonium is difficult to store safely because, in certain forms, it can spontaneously ignite and burn. Moreover, it poses a criticality risk when significant quantities are stored in close proximity. The amount of plutonium proposed for LLNL is sufficient to make more than 300 nuclear bombs. Because of the health risks, the proliferation dangers, storage hazards, and very serious security concerns, we believe it is irresponsible to store plutonium, highly enriched uranium and tritium at LLNL. We are calling upon the DOE to de-inventory the plutonium, highly enriched uranium and tritium at LNL. We are calling upon the DOE to de-inventory the plutonium, highly enriched uranium and tritium stocks at LLNL rather than to increase them. 3.74.01 3. The SWEIS proposes to increase the at-risk limits for tritium ten fold, from just over 3 grams to 30 grams. The SWEIS proposes to increase the at-risk limit for plutonium from 44 pounds to 132 pounds. We believe it is unsafe to increase the amount of tritium and plutonium tan can be "in process" in one room at one time. LINL has a history of criticality violations with plutonium and releases of both tritium and plutonium, making it evident that these amounts should be decreased; rather than increased. 4. This plan will revive a project that was canceled more than 10 years ago because it was dangerous and unencessary. The project was called Plutonium — Atomic Vapor Laser Isotope Separation (AVLIS). Now it is called the "Integrated Technology Project (TP) and the "Advanced Materials Program" (AMP). This is a scheme to heat and vaporize plutonium and then shoot multiple laser beams through the vapor to separate out puttonium in the proper. The TPI -AMP is a health risk and a nuclear proliferation nightmare. We believe the ITP and AMP work should be cancelled as the Plutonium AVLIS was cancelled in 1900 - this time permanently. 5. This plan makes Livermore Lab the place	to the fence. Putronium is difficult to store safely because, in certain forms, it can spontaneously ignite and burn. Moreover, it poses a criticality risk when significant quantities are stored in close proximity. The amount of plutonium proposed for LLNL is sufficient to make more than 300 nuclear bombs. Because of the health risks, the proliferation dangers, storage hazards, and very serious security concerns, we believe it is irresponsible to store plutonium, highly enriched uranium and tritium at LLNL. We are calling upon the DOE to de-inventory the plutonium, highly enriched uranium and tritium at LLNL. We are calling upon the DOE to de-inventory the plutonium, highly enriched uranium and tritium stocks at LLNL rather than to increase them. 3. The SWEIS proposes to increase the at-risk limits for tritium ten fold, from just over 3 grams to 30 grams. The SWEIS proposes to increase the at-risk limit for plutonium from 44 pounds to 132 pounds. We believe it is usasfe to increase the amount of tritium and plutonium that can be "in process" in one room at one time. LLNL has a history of criticality violations with plutonium and releases of both tritium and plutonium, making it evident that these amounts should be decreased; rather than increased. 4. This plan will revive a project that was canceled more than 10 years ago because it was dangerous and unnecessary. The project was called Plutonium — Atomic Vapor Laser Isotope Separation (AVLIS). Now it is called the "Integrated Technology Project" (TP) and the "Advanced Materials Program" (AMP). This is a scheme to heat and vaporize plutonium and then shoot multiple laser beams through the vapor to separate out plutonium for the plutonium isotopes. The TP/ AMP is a health risk and a nuclear proliferation nightmare. We believe the ITP and AMP work should be cancelled as the Plutonium AVLIS was cancelled in 1990 - this time permanently. 5. This plan makes Livermore Lab the place to test new manufacturing technologies for producing plutonium pits for nuclear weap	¥ 19		
to the fence. Plutonium is difficult to store safely because, in certain forms, it can spontaneously ignite and burn. Moreover, it poses a criticality risk when significant quantities are stored in close proximity. The amount of plutonium proposed for LLNL is sufficient to make more than 300 nuclear bombs. Because of the health risks, the proliferation dangers, storage hazards, and very serious security concerns, we believe it is irresponsible to store plutonium, highly enriched uranium and tritium at LLNL. We are calling upon the DOE to de-inventory the plutonium, highly enriched uranium and tritium stocks at LLNL rather than to increase the at-risk limits for tritium ten fold, from just over 3 grams to 30 grams. The SWEIS proposes to increase the at-risk limit for plutonium from 44 pounds to 132 pounds. We believe it is usuasfe to increase the at-risk limit for plutonium from 44 pounds to 132 pounds. We believe it is usuasfe to increase the at-risk limit for plutonium from 44 pounds to 132 pounds. We believe it is usuasfe to increase the at-risk limit for plutonium from 44 pounds to 132 pounds. We believe it is usuasfe to increase the at-risk limit for plutonium from 44 pounds to 132 pounds. We believe it is usuasfe to increase the at-risk limit for plutonium from 44 pounds to 132 pounds. We believe it is usuasfe to increase the at-risk limit for plutonium mad plutonium should be decreased; rather than increased. 4. This plan will revive a project that was canceled more than 10 years ago because it was dangerous and unnecessary. The project was called Plutonium — Atomic Vapor Laser Isotope Separation (AVLIS). Now it is called the "Integrated Technology Project" (TTP) and the "Advanced Materials Program" (AMP). This is a scheme to heat and vaporize plutonium and then shoot multiple laser beams through the vapor to separate out plutonium plutonium pits for nuclear weapons. A pit is the softball-sized piece of plutonium that sits inside a modern nuclear weapons and triggers its thermonuclear explosion. DoE says	to the fence. Putronium is difficult to store safely because, in certain forms, it can spontaneously ignite and burn. Moreover, it poses a criticality risk when significant quantities are stored in close proximity. The amount of plutonium proposed for LLNL is sufficient to make more than 300 nuclear bombs. Because of the health risks, the proliferation dangers, storage hazards, and very serious security concerns, we believe it is irresponsible to store plutonium, highly enriched uranium and tritium at LLNL. We are calling upon the DOE to de-inventory the plutonium, highly enriched uranium and tritium at LLNL. We are calling upon the DOE to de-inventory the plutonium, highly enriched uranium and tritium stocks at LLNL rather than to increase them. 3. The SWEIS proposes to increase the at-risk limits for tritium ten fold, from just over 3 grams to 30 grams. The SWEIS proposes to increase the at-risk limit for plutonium from 44 pounds to 132 pounds. We believe it is usasfe to increase the amount of tritium and plutonium that can be "in process" in one room at one time. LLNL has a history of criticality violations with plutonium and releases of both tritium and plutonium, making it evident that these amounts should be decreased; rather than increased. 4. This plan will revive a project that was canceled more than 10 years ago because it was dangerous and unnecessary. The project was called Plutonium — Atomic Vapor Laser Isotope Separation (AVLIS). Now it is called the "Integrated Technology Project" (TP) and the "Advanced Materials Program" (AMP). This is a scheme to heat and vaporize plutonium and then shoot multiple laser beams through the vapor to separate out plutonium for the plutonium isotopes. The TP/ AMP is a health risk and a nuclear proliferation nightmare. We believe the ITP and AMP work should be cancelled as the Plutonium AVLIS was cancelled in 1990 - this time permanently. 5. This plan makes Livermore Lab the place to test new manufacturing technologies for producing plutonium pits for nuclear weap			
grams to 30 grams. The SWEIS proposes to increase the at-risk limit for plutonium from 44 pounds to 132 pounds. We believe it is unsafe to increase the amount of tritium and plutonium that can be "in process" in one room at one time. LINL has a history of criticality violations with plutonium and releases of both tritium and plutonium, making it evident that these amounts should be decreased; rather than increased. 4. This plan will revive a project that was canceled more than 10 years ago because it was dangerous and unnecessary. The project was called Plutonium—Atomic Vapor Laser Isotope Separation (AVLIS). Now it is called the "Integrated Technology Project" (TPP) and the "Advanced Materials Program" (AMP). This is a scheme to heat and vaporize plutonium and then shoot multiple laser beams through the vapor to separate out plutonium isotopes. The ITP / AMP is a health risk and a nuclear proliferation nightmare. We believe the ITP and AMP work should be cancelled as the Plutonium AVLIS was cancelled in 1990 - this time permanently. 5. This plan makes Livermore Lab the place to test new manufacturing technologies for producing plutonium pits for nuclear weapons. A pit is the softball-sized piece of plutonium that sits inside a modern nuclear weapon and triggers its thermonuclear explosion. DOE says these new technologies will then be used in a new bomb factory, called the Modern Pit Facility (MPF). Public and Congressional opposition to the MPF has caused its delay this year. The Livermore Lab plutonium pit program goes full-speed ahead in the wrong direction. It will enable the MPF and production of 150 - 450 plutonium bomb cores annually, with the ability to run double shifts and produce 900 cores per year. This production capability would approximate the combined nuclear arsenals of France and China — each year. We call upon the DOE to halt all work on plutonium pit production technologies at Livermore Lab. We believe it is premature for the DOE to spend taxpayer dollars on this technology and the prudent	grams to 30 grams. The SWEIS proposes to increase the at-risk limit for plutonium from 44 pounds to 132 pounds. We believe it is unsafe to increase the amount of tritium and plutonium that can be "in process" in one room at one time. LINL has a history of criticality violations with plutonium and releases of both tritium and plutonium, making it evident that these amounts should be decreased; rather than increased. 4. This plan will revive a project that was canceled more than 10 years ago because it was dangerous and unnecessary. The project was called Plutonium—Atomic Vapor Laser Isotope Separation (AVLIS). Now it is called the "Integrated Technology Project" (TPP) and the "Advanced Materials Program" (AMP). This is a scheme to heat and vaporize plutonium and then shoot multiple laser beams through the vapor to separate out plutonium isotopes. The ITP / AMP is a health risk and a nuclear proliferation nightmare. We believe the ITP and AMP work should be cancelled as the Plutonium AVLIS was cancelled in 1990 - this time permanently. 5. This plan makes Livermore Lab the place to test new manufacturing technologies for producing plutonium pits for nuclear weapons. A pit is the softball-sized piece of plutonium that sits inside a modern nuclear weapon and triggers its thermonuclear explosion. DOE says these new technologies will then be used in a new bomb factory, called the Modern Pit Facility (MPF). Public and Congressional opposition to the MPF has caused its delay this year. The Livermore Lab plutonium pit program goes full-speed ahead in the wrong direction. It will enable the MPF and production of 150 - 450 plutonium bomb cores annually, with the ability to run double shifts and produce 900 cores per year. This production capability would approximate the combined nuclear arsenals of France and China — each year. We call upon the DOE to halt all work on plutonium pit production technologies at Livermore Lab. We believe it is premature for the DOE to spend taxpayer dollars on this technology and the prudent	_,	to the fence. Plutonium is difficult to store safely because, in certain forms, it can spontaneously ignite and burn. Moreover, it poses a criticality risk when significant quantities are stored in close proximity. The amount of plutonium proposed for LLNL is sufficient to make more than 300 nuclear bombs. Because of the health risks, the proliferation dangers, storage hazards, and very serious security concerns, we believe it is irresponsible to store plutonium, highly enriched uranium and tritium at LLNL. We are calling upon the DOE to de-inventory the plutonium, highly enriched uranium and tritium	
dangerous and unnecessary. The project was called Plutonium — Atomic Vapor Laser Isotope Separation (AVLIS). Now it is called the "Integrated Technology Project" (TIP) and the "Advanced Materials Program" (AMP). This is a scheme to heat and vaporize plutonium and then shoot multiple laser beams through the vapor to separate out plutonium isotopes. The ITP / AMP is a health risk and a nuclear proliferation nightmare. We believe the ITP and AMP work should be cancelled as the Plutonium AVLIS was cancelled in 1990 - this time permanently. 5. This plan makes Livermore Lab the place to test new manufacturing technologies for producing plutonium pits for nuclear weapons. A pit is the softball-sized piece of plutonium that sits inside a modern nuclear weapon and triggers its thermonuclear explosion. DOE says these new technologies will then be used in a new bomb factory, called the Modern Pit Pacility (MPF). Public and Congressional opposition to the MPF has caused its delay this year. The Livermore Lab plutonium pit program goes full-speed ahead in the wrong direction. It will enable the MPF and production of 150 - 450 plutonium bomb cores annually, with the ability to run double shifts and produce 900 cores per year. This production capability would approximate the combined nuclear arsenals of France and China — each year. We call upon the DOE to halt all work on plutonium pit production technologies at Livermore Lab. We believe it is premature for the DOE to spend taxpayer dollars on this technology and the prudent and reasonable outcome is to delay or cancel this project. 6. This plan will add plutonium, highly-enriched uranium and large quantities of lithium hydride to experiments in the National Ignition Facility mega-laser when it is completed at Livermore Lab. Using these materials in the NFF will increase its usefulness for nuclear weapons development, including for the design of new types of nuclear weapons. It will also make the NIF more hazardous to workers and the environment. This is not only dangerous	dangerous and unnecessary. The project was called Plutonium — Atomic Vapor Laser Isotope Separation (AVLIS). Now it is called the "Integrated Technology Project"(TPP) and the "Advanced Materials Program"(AMP). This is a scheme to heat and vaporize plutonium and then shoot multiple laser beams through the vapor to separate out plutonium isotopes. The ITP / AMP is a health risk and a nuclear proliferation nightmare. We believe the ITP and AMP work should be cancelled as the Plutonium AVLIS was cancelled in 1990 - this time permanently. 5. This plan makes Livermore Lab the place to test new manufacturing technologies for producing plutonium pits for nuclear weapons. A pit is the softball-sized piece of plutonium that sits inside a modern nuclear weapon and triggers its thermonuclear explosion. DOE says these new technologies will then be used in a new bomb factory, called the Modern Pit Pacility (MPF). Public and Congressional opposition to the MPF has caused its delay this year. The Livermore Lab plutonium pit program goes full-speed ahead in the wrong direction. It will enable the MPF and production of 150 - 450 plutonium bomb cores annually, with the ability to run double shifts and produce 900 cores per year. This production capability would approximate the combined nuclear arsenals of France and China — each year. We call upon the DOE to halt all work on plutonium pit production technologies at Livermore Lab. We believe it is premature for the DOE to spend taxpayer dollars on this technology and the prudent and reasonable outcome is to delay or cancel this project. 6. This plan will add plutonium, highly-enriched uranium and large quantities of lithium hydride to experiments in the National Ignition Facility mega-laser when it is completed at Livermore Lab. Using these materials in the NFF will precase its usefulness for nuclear weapons development, including for the design of new types of nuclear weapons. It will also make the NIF more hazardous to workers and the environment. This is not only dangerous to	4/33.01,	grams to 30 grams. The SWEIS proposes to increase the at-risk limit for plutonium from 44 pounds to 132 pounds. We believe it is unsafe to increase the amount of tritium and plutonium that can be "in process" in one room at one time. LLNL has a history of criticality violations with plutonium and releases of both tritium and plutonium, making it	
plutonium and then shoot multiple laser beams through the vapor to separate out plutonium isotopes. The ITP / AMP is a health risk and a nuclear proliferation nightmare. We believe the ITP and AMP work should be cancelled as the Plutonium AVLIS was cancelled in 1990 - this time permanently. 5. This plan makes Livermore Lab the place to test new manufacturing technologies for producing plutonium pits for nuclear weapons. A pit is the softball-sized piece of plutonium that sits inside a modern nuclear weapon and triggers its thermonuclear explosion. DOE says these new technologies will then be used in a new bomb factory, called the Modern Pit Facility (MPF). Public and Congressional opposition to the MPF has caused its delay this year. The Livermore Lab plutonium pit program goes full-speed ahead in the wrong direction. It will enable the MPF and production of 150 - 450 plutonium bomb cores annually, with the ability to run double shifts and produce 900 cores per year. This production capability would approximate the combined nuclear arsenals of France and China — each year. We call upon the DOE to halt all work on plutonium pit production technologies at Livermore Lab. We believe it is premature for the DOE to spend taxpayer dollars on this technology and the prudent and reasonable outcome is to delay or cancel this project. 6. This plan will add plutonium, highly-enriched uranium and large quantities of lithium hydride to experiments in the National Ignition Facility mega-laser when it is completed at Livermore Lab. Using these materials in the NFF will increase its usefulness for nuclear weapons development, including for the design of new types of nuclear weapons. It will also make the NIF more hazardous to workers and the environment. This is not only dangerous to people's health and safety, and a proliferation risk, but it is sure to	plutonium and then shoot multiple laser beams through the vapor to separate out plutonium isotopes. The ITP / AMP is a health risk and a nuclear proliferation nightmare. We believe the ITP and AMP work should be cancelled as the Plutonium AVLIS was cancelled in 1990 - this time permanently. 5. This plan makes Livermore Lab the place to test new manufacturing technologies for producing plutonium pits for nuclear weapons. A pit is the softball-sized piece of plutonium that sits inside a modern nuclear weapon and triggers its thermonuclear explosion. DOE says these new technologies will then be used in a new bomb factory, called the Modern Pit Facility (MPF). Public and Congressional opposition to the MPF has caused its delay this year. The Livermore Lab plutonium pit program goes full-speed ahead in the wrong direction. It will enable the MPF and production of 150 - 450 plutonium bomb cores annually, with the ability to run double shifts and produce 900 cores per year. This production capability would approximate the combined nuclear arsenals of France and China — each year. We call upon the DOE to halt all work on plutonium pit production technologies at Livermore Lab. We believe it is premature for the DOE to spend taxpayer dollars on this technology and the prudent and reasonable outcome is to delay or cancel this project. 6. This plan will add plutonium, highly-enriched uranium and large quantities of lithium hydride to experiments in the National Ignition Facility mega-laser when it is completed at Livermore Lab. Using these materials in the NF will increase its usefulness for nuclear weapons development, including for the design of new types of nuclear weapons. It will also make the NIF more hazardous to workers and the environment. This is not only dangerous to people's health and safety, and a proliferation risk, but it is sure to		dangerous and unnecessary. The project was called Plutonium — Atomic Vapor Laser Isotope Separation (AVLIS). Now it is called the "Integrated Technology Project" (ITP)	
producing plutonium pits for nuclear weapons. A pit is the softball-sized piece of plutonium that sits inside a modern nuclear weapon and triggers its thermonuclear explosion. DOE says these new technologies will then be used in a new bomb factory, called the Modern Pit Facility (MPF). Public and Congressional opposition to the MPF has caused its delay this year. The Livermore Lab plutonium pit program goes full-speed ahead in the wrong direction. It will enable the MPF and production of 150 - 450 plutonium bomb cores annually, with the ability to run double shifts and produce 900 cores per year. This production capability would approximate the combined nuclear arsenals of France and China — each year. We call upon the DOE to halt all work on plutonium pit production technologies at Livermore Lab. We believe it is premature for the DOE to spend taxpayer dollars on this technology and the prudent and reasonable outcome is to delay or cancel this project. 6. This plan will add plutonium, highly-enriched uranium and large quantities of lithium hydride to experiments in the National Ignition Facility mega-laser when it is completed at Livermore Lab. Using these materials in the NFF will increase its usefulness for nuclear weapons development, including for the design of new types of nuclear weapons. It will also make the NIF more hazardous to workers and the environment. This is not only dangerous to people's health and safety, and a proliferation risk, but it is sure to	producing plutonium pits for nuclear weapons. A pit is the softball-sized piece of plutonium that sits inside a modern nuclear weapon and triggers its thermonuclear explosion. DOE says these new technologies will then be used in a new bomb factory, called the Modern Pit Facility (MPF). Public and Congressional opposition to the MPF has caused its delay this year. The Livermore Lab plutonium pit program goes full-speed ahead in the wrong direction. It will enable the MPF and production of 150 - 450 plutonium bomb cores annually, with the ability to run double shifts and produce 900 cores per year. This production capability would approximate the combined nuclear arsenals of France and China — each year. We call upon the DOE to halt all work on plutonium pit production technologies at Livermore Lab. We believe it is premature for the DOE to spend taxpayer dollars on this technology and the prudent and reasonable outcome is to delay or cancel this project. 6. This plan will add plutonium, highly-enriched uranium and large quantities of lithium hydride to experiments in the National Ignition Facility mega-laser when it is completed at Livermore Lab. Using these materials in the NFF will increase its usefulness for nuclear weapons development, including for the design of new types of nuclear weapons. It will also make the NIF more hazardous to workers and the environment. This is not only dangerous to people's health and safety, and a proliferation risk, but it is sure to	5/27.01	plutonium and then shoot multiple laser beams through the vapor to separate out plutonium isotopes. The ITP / AMP is a health risk and a nuclear proliferation nightmare. We believe the ITP and AMP work should be cancelled as the Plutonium AVLIS was	
plutonium bomb cores annually, with the ability to run double shifts and produce 900 cores per year. This production capability would approximate the combined nuclear arsenals of France and China — each year. We call upon the DOE to halt all work on plutonium pit production technologies at Livermore Lab. We believe it is premature for the DOE to spend taxpayer dollars on this technology and the prudent and reasonable outcome is to delay or cancel this project. 6. This plan will add plutonium, highly-enriched uranium and large quantities of lithium hydride to experiments in the National Ignition Facility mega-laser when it is completed at Livermore Lab. Using these materials in the NIF will increase its usefulness for nuclear weapons development, including for the design of new types of nuclear weapons. It will also make the NIF more hazardous to workers and the environment. This is not only dangerous to people's health and safety, and a proliferation risk, but it is sure to	plutonium bomb cores annually, with the ability to run double shifts and produce 900 cores per year. This production capability would approximate the combined nuclear arsenals of France and China — each year. We call upon the DOE to halt all work on plutonium pit production technologies at Livermore Lab. We believe it is premature for the DOE to spend taxpayer dollars on this technology and the prudent and reasonable outcome is to delay or cancel this project. 6. This plan will add plutonium, highly-enriched uranium and large quantities of lithium hydride to experiments in the National Ignition Facility mega-laser when it is completed at Livermore Lab. Using these materials in the NIF will increase its usefulness for nuclear weapons development, including for the design of new types of nuclear weapons. It will also make the NIF more hazardous to workers and the environment. This is not only dangerous to people's health and safety, and a proliferation risk, but it is sure to	100 mg/s	producing plutonium pits for nuclear weapons. A pit is the softball-sized piece of plutonium that sits inside a modern nuclear weapon and triggers its thermonuclear explosion. DOE says these new technologies will then be used in a new bomb factory, called the Modern Pit Facility (MPF). Public and Congressional opposition to the MPF has caused its delay this year. The Livermore Lab plutonium pit program goes full-speed	
6. This plan will add plutonium, highly-enriched uranium and large quantities of lithium hydride to experiments in the National Ignition Facility mega-laser when it is completed at Livermore Lab. Using these materials in the NIF will increase its usefulness for nuclear weapons development, including for the design of new types of nuclear weapons. It will also make the NIF more hazardous to workers and the environment. This is not only dangerous to people's health and safety, and a proliferation risk, but it is sure to	6. This plan will add plutonium, highly-enriched uranium and large quantities of lithium hydride to experiments in the National Ignition Facility mega-laser when it is completed at Livermore Lab. Using these materials in the NIF will increase its usefulness for nuclear weapons development, including for the design of new types of nuclear weapons. It will also make the NIF more hazardous to workers and the environment. This is not only dangerous to people's health and safety, and a proliferation risk, but it is sure to	6/37.01	plutonium bomb cores annually, with the ability to run double shifts and produce 900 cores per year. This production capability would approximate the combined nuclear arsenals of France and China — each year. We call upon the DOE to halt all work on plutonium pit production technologies at Livermore Lab. We believe it is premature for the DOE to spend taxpayer dollars on this technology and the prudent and reasonable	
at Livermore Lab. Using these materials in the NIF will increase its usertimess for nuclear weapons development, including for the design of new types of nuclear weapons. It will also make the NIF more hazardous to workers and the environment. This is not only dangerous to people's health and safety, and a proliferation risk, but it is sure to	at Livermore Lab. Using these materials in the NIF will increase its usertimess for nuclear weapons development, including for the design of new types of nuclear weapons. It will also make the NIF more hazardous to workers and the environment. This is not only dangerous to people's health and safety, and a proliferation risk, but it is sure to	7/26 01	 This plan will add plutonium, highly-enriched uranium and large quantities of lithium hydride to experiments in the National Ignition Facility mega-laser when it is completed 	
2	2		nuclear weapons development, including for the design of new types of nuclear weapons. It will also make the NIF more hazardous to workers and the environment. This is not	
2	2	88		
			2	
			*	

Committee to Minimize Toxic Waste, Pamela Sihyola, Co-Chair Page 3 of 10

7/26.01	result in an inordinate cost to the taxpayer. No cost estimate associated with this proposal	
8/26.03		
cont.		
e a	7. The SWEIS reveals plans to manufacture tritium targets at LLNL. The tritium-filled targets are the radioactive fuel pellets that the NIF's 192 laser beams will "shoot" in an attempt to create a thermonuclear explosion. Producing the targets will increase the amount of tritium that is used in any one room at Livermore Lab from the current limit of just over 3 grams to 30 grams — nearly 10-fold more. In the mid-1990's, LLNL stated	
9/26.04	that target fabrication was to occur off-site because of LLNL's proximity to large	
	populations. Livermore Lab has a history of tritium accidents, spills and releases. The NIF will increase the amount of airborne radioactivity emanating from LLNL. We call on	
	DOE to cancel plans to manufacture tritium targets for NIF at Livermore Lab. Further, we urge cancellation of the NIF megalaser. Cancellation of NIF is a reasonable	
	alternative that should be fully analyzed in the SWEIS.	
4.74	8. This plan also calls for Livermore Lab to develop diagnostics to "enhance" the nation's	
0/39.01	readiness to conduct full-scale underground nuclear tests. This is a dangerous step back to the days of unrestrained nuclear testing. All work at LLNL to reduce the time it takes to	
0/37.01	conduct a full-scale underground nuclear test should be terminated immediately.	
	9. This plan mixes bugs and bombs at Livermore. It calls for collocating an advanced bio-	
5	warfare agent facility (BSL-3) with nuclear weapons activities in a classified area at Livermore Lab. The plan proposes genetic modification and aerosolization (spraying)	
1275	with live anthrax, plague and other deadly pathogens. This could weaken the international	
1/35.01	biological weapons treaty and it poses a risk to workers, the public and the environment here in the Bay Area. The draft SWEIS does not adequately describe these	
8	programs, or the unique security, health and environmental hazards they present.	
25.	Construction should be halted on the portable BSL-3 facility. All plans to conduct advanced bio-warfare agent (BSL-3) research on site at LLNL should be terminated.	
ne I	10. There are 108 buildings identified at LLNL as having potential seismic deficiencies	
	relative to current codes. The SWEIS should include a complete list of these buildings and an accounting of the ones that house or may house hazardous, radiological and	
1.0	biological research materials. LLNL is located within 1 kilometer of two significant	
2/14.01	earthquake faults, including the Las Positas Fault Zone less than 200 feet from the LLNL boundary. How can we mitigate harm done from an earthquake that damages these	
1	buildings before they are brought up to code? We urge the Livermore Lab to stop any	
	work with hazardous, radioactive or biological substances that may be occurring in any building that does not comply with federal standards.	
_ [11. A contractor will be paid to package and ship more than 1,000 drums of transuranic	
3/22.01	and mixed transuranic waste to the WIPP dump in New Mexico, yet the SWEIS says this is exempt from environmental review. This work in its entirety must be included in the review.	
	3	

March 2005

Chapter 2 - Comment Documents LLNL SW/SPEIS

Committee to Minimize Toxic Waste, Pamela Sihyola, Co-Chair Page 4 of 10

Committee to Minimize Toxic Waste, Pamela Sihyola, Co-Chair Page 5 of 10

12. The DOE does not acknowledge in the SWEIS that the double-walled shipping containers described in the document may be replaced by less health - protective single-14/20.05 lined containers. We believe that no waste should be shipped in single-walled containers and the SWEIS should provide a guarantee to that effect. 13. The Purpose and Need statement in the SWEIS relies heavily upon the US Nuclear Posture Review, which calls for an aggressive modernization and manufacturing base within the US nuclear weapons complex. This stands in stark contrast to the binding legal mandate to shift "from developing and producing new weapons designs to dismantling obsolete weapons and maintaining a smaller weapons arsenal". We believe a revised Purpose and Need statement should accurately reflect the Livermore Lab's legal responsibility with regard to US law, including US obligations under the nuclear Non-Proliferation Treaty (NPT). Further, the Purpose and Need statement in the SWEIS almost completely omits LLNL's important role in civilian science research. This omission fatally flaws the alternatives analysis in the SWEIS by neglecting to consider the expanded role that civillan science programs at the LLNL could play in the next decade. 16/07.01 The alternatives analysis should be revised to consider LLNL's role in light of the commitments in the NPT and the Livermore Lab's civilian science mission as well as the compelling case for removing special nuclear materials (i.e., plutonium and highly enriched uranium) from the LLNL site. -Chair/CMTW P.O. Box 9646 Berkeley, CA 94709 cc: Senator Dianne Feinstein Room 331, Senate Hart Office Bldg. Washington, DC 20510 Or email to: michele_senders@feinstein.senate.gov Senator Barbara Boxer Room 112, Senate Hart Office Bldg. Washington, DC 20510 Or email to: jennifer_tang@boxer.senate.gov

01228 **U.S.** wants to remove plutonium from lab Security concerns at Livermore cited By Zachary Coile CHRONICLE WASHINGTON BUREAU WASHINGTON — Energy Sec-retary Spencer Abraham said Fri-day he wanted to remove weap-ons-grade nuclear material from the Lawrence Livermore National Laboratory because of concerns over the lab's ability to protect ra-dicactive, material SATURDAY, MAY 8, and its location in the densely populated Bay Area.
University of California officials, who manage the weapons lab for the Energy Department, insisted the second of the control of the cont lab for the Energy Department, insisted the proposal was only be-ing studied by the agency and that even if it was approved, the re-moval of the weapons material might be a decade or more away. But Abaham made clear that he But Abraham made clear that he saw the storage of plutonium and enriched uranium at Lawrence Livermore as a serious safety is "While the requirements of stockpile stewardship mean that we must retain nuclear materials at Lawrence Livermore National Laboratory today, over the long

LIVERMORE: Page AS

2-78 March 2005

Committee to Minimize Toxic Waste, Pamela Sihvola, Co-Chair Page 6 of 10

Committee to Minimize Toxic Waste, Pamela Sihvola, Co-Chair

nuclea

LIVERMORE LAB UNDER SCRUTINY

Se

Third Abraham releases his to Congress early next ye use Congress early next ye university plans to try to co se the secretary of the need pat least some nuclear mait with the lab.

This is all part of longer tegy," said UC spokens is Harrington. ". "We leaved to working with the seared to working input."

Page 7 of 10

LIVERMORE LAB UNDER SCRUTINY

Nuke watchdog at odds with **Energy Dept. on lab's future**

By Keay Davidson CHRONICI E SCIENCE WRITER

The fate of Lawrence Livermore National Laboratory is turn-ing into a confrontation of two Washington titans — the U.S. sec-retary of energy and the head of the secretive agency that oversees the nation's nuclear weapons

complex.

Some lab-watchers are confident Livermore can remain a busy hive of nonmilitary scientific research whether it remains a nuclear weapons lab or not, they said Friday after Energy Secretary Spencer Abraham announced that he would investigate the pos-sibility of moving all of Liver-more's plutonium to a more secure site, far away from the suburbs that increasingly encroach

Yet within Livermore lab, pressure for continued nuclear weap-ons work remains strong. That pressure could force a confronta-tion between Abraham and Linton Brooks, czar of the National Nuclear Security Administration, which oversees the huge U.S. nuclear weapons complex from Liv-ermore to Savannah River, S.C. Brooks' testimony to Congress

last week and lab officials' comments Thursday made clear their belief that they can continue to safely operate the lab's plutonium facility in Livermore without en-

dangering workers or residents. But Abraham's speech Friday implicitly expressed a lack of con-fidence in those reassurances.

Danielle Brian, executive di-rector of the Project on Government Oversight in Washington, said the Bush administration was split over what to do about the nuclear weapons complexes. "There is a divide between the secretary's intentions and what (the nuclear security agency) wants to happen. (The agency) is really in bed with the labs, and it's trying to protect the labs at whatever cost.
"Abraham wants to drag the

complex kicking and screaming biomedical work," says a frequent kdavidson@sfchronicle.com



the post-9/11 world ... (while the nuclear security agen cy) is digging in its heels and trying to protect the lab's interest over the nation's interest at all

In his testimony April 27 to the House Government Reform sub-committee, Brooks said plutonium should stay at Livermore so scientists there can assess the reliability of the nation's nuclear ar-senal. Alluding to proposals to consolidate all U.S. weaponsgrade plutonium at a single site. Brooks countered: "Consolida-tion is not a panacea."

The big question raised by Abraham's announcement Friday is: If Livermore loses its plutonium cache, what is the lab's future?

"I don't want to go there," said Livermore spokesperson David Schwoegler in brief remarks. "It': too early to speculate on plutoni-um being moved out of here. . . We look forward to working with (the Energy Department and the nuclear security agency) on the studies that are mentioned" by Abraham in his speech.

Lab officials have long touted the nonmilitary applications of Livermore technology built mainly for military reasons, such as their huge super-laser - the Na-tional Ignition Facility, still under construction - which could be used to simulate astrophysical phenomena such as exploding Should its half-century-long

plutonium era end, "there's plenty (of nonmilitary work) for Livermore to do . . . all kinds of environmental and energy work and

critic, Christopher Paine of the Natural Resources Defense Council in Washington.

Anti-nuclear groups do not typically praise actions by the Bush administration, but some were quick to commend Abraham's speech. The speech is "actually quite significant and all to the good," said Paul Leventhal, founding president of the Nuclear Control Institute in Washington.

Surrounded by highways, sub-urbs and airfields, "all they've got (for protection at Livermore) is a fence," Leventhal "They're counting on their guard force to defeat an adversary. But if you had an adversary comparable to 9/11, a suicidal adversary coming in large numbers from several would be extremely hard pressed to fend them off."

If the plutonium leaves Livermore, where should it go? Abraham's speech didn't explore this unavoidable topic, but in interviews Friday, outside analysts sug-gested possible destinations:

► The Device Assembly Facility, a highly secure bunker at the southern Nevada nuclear test site, where the United States exploded

nuclear bombs for four decades.

Pantex Plant in rural Texas, whose Web site identifies it as "America's only nuclear weapons assembly and disassembly facili-ty." Some 12,000 plutonium "pits" - roughly 30 to 40 tons' worth of spherical cores from dismantled nuclear weapons — now rest in joloo-style bunkers at Pantex, 17 miles from Amarillo.

► Los Alamos National Laboratory in New Mexico, the nation's first atomic weapons facility, where the first A-bomb was developed in 1945. One advantage of Los Alamos is that its staff has extensive experience in working with plutonium. In fact, Los Alamos currently stores considerably more plutonium than Livermore

, MAY 8,

46 CENTS

PLUS TAX

March 2005

Chapter 2 - Comment Documents LLNL SW/SPEIS

Committee to Minimize Toxic Waste, Pamela Sihvola, Co-Chair **Page 8 of 10**

Committee to Minimize Toxic Waste

Addendum to Comments on the Department of Energy's (DOE) Site-Wide Environmental Impact Statement (EIS) for Continued Operations at Lawrence Livermore National Laboratory (LLML)

" U.S. WANTS TO REMOVE PLUTONIUM FROM LAB. SECURITY CONCERNS AT LIVERMORE CITED", was the front page headline in the San Francisco Chronicle on Saturday, May 8, 2004. (Attachment 1)

17/08.02

We applaud Energy Secretary Spencer Abraham's proposal to remove weapons-grade nuclear material, i.e. plutonium and enriched uranium, from LLNL due to concerns over the lab's ability to protect radioactive materials from terrorists and its location in the densely populated San Francisco Bay

cont.

We urge the DOE to replace weapons projects with peaceful, civilian scientific capabilities and missions at the Livermore lab by proposing new, unclassified programs in environmental clean-up, non-polluting and renewable energy, earth sciences, astro physics, atmospheric physics and others. We hope that Secretary Abraham's proposal will finally lead to a major shift in LLNL's mission.

Congress passed a bill last year requiring the University of California's (UC) contracts to run Livermore and the Lawrence Berkeley National Laboratory (LBNL) to be put out to competative bidding, Secretary Abraham had announced a year earlier that the UC would have to bid to manage Los Alamos, which it has run for more that 60 years.

LBNL originated on the University of California Berkeley (UCB) campus as the UC Radiation Laboratory in 1932. In the late 1930's the regents gave Ernest O. Lawrence permission to build in the Strawberry Canyon, above and east of the Central Campus. In 1940 the "Rad Lab" was relocated to its present site. Dr. Lawrence wrote that the new site "gave privacy and sufficient distance to alleviate the possible ill effects of errant radiation upon the town below." However, this was not to be. After 1948 the facility was funded by the U.S. Atomic Energy Commission (AEC) and its successor agencies. In 1972 the name was changed to Lawrence Berkeley Laboratory, which by this time had become a major nuclear industrial complex surrounded by residential neighborhoods.

Committee to Minimize Toxic Waste, Pamela Sihvola, Co-Chair Page 9 of 10

In recent years LBNL has been plagued by financial and environmental scandals and science fraud. In newspapers we see articles with headlines such as:

"Berkeley Lab Found Research Fabricated" (San Francisco Chronicle

7/13/2002)
"LBNL Finds Accounting to be Sloppy" (Berkeley Voice 10/3/2003)

"Berkeley Lab Poses Health Risk, Fire Could Release Dangerous Radioactivity" (San Francisco Chronicle 2/6/ 2001)

18/32.03

There is a lot of mistrust in the community regarding LBNL's willingness and ability to manage and control toxic, radioactive and hazardous pollution from the many sources at the lab. The evidence is in the dozen contaminated groundwater plumes in the ecologically sensitive Strawberry Creek Watershed, in the radioactive vegetation, tritium contaminated eucalyptus grove offsite next to the Lawrence Hall of Science, a children's museum and school, etc,

17/08.02

In view of Secretary Abraham's proposal to remove plutonium/ weapons work from Livermore, it would seem logical and financially prudent, since both LBNL and LLNL are taxpayer funded, for DOE to consolidate resources and transfer all the redundant scientific missions/activities and divisions from LBNL to Livermore. This would help LLNL to remain DOE's major civilian scientific laboratory in California, and would free over 200 acres of land, now occupied by LBNL to divert back to UCB, since the University, as described in the UCB 2020 Long Range Development Plan (LRDP) is in dire need for land and space.

The UCB 2020 LRDL mandates the University to accept 4000 new students by year 2010, as the Central Campus and the contiguous students by year 2010, as the Central Campus and the contiguous neighborhoods are already cracking at their seams. UCB is a small urban campus, already overcrowded having created enormous traffic management and safety, fire safety, utility and sewer management, environmental and ecological degradation etc. problems for the City and citizens of Berkeley.

We propose DOE's divestment from LBNL and ask that a masterplan and a timeline be provided for the transfer of activities from LBNL to LLNL. We also ask that a timeline and budget be included for the site clean-up, that would allow UCB to include sections of the site in the 2020 LRDP planning, for instance to be used for the proposed faculty and student housing, just a walking distance from the main campus.

The ultimate goal is that the LBNL site be converted into an integral part of the core campus, without barbed wire fences, security guards and constants threats of terrorist attacks. It should become a place where the University could continue its mission as an institute of higher learning.

2-80

March 2005

Committee to Minimize Toxic Waste, Pamela Sihyola, Co-Chair Page 10 of 10

Specific comment and questions re: LLNL SW/SPEIS - Summary p.S-19 titled: BERKELEY WASTE DRUMS

- What is the exact content of the 14 drums (3000 liters) of transuranic and mixed transuranic waste?
- 2. Where are these drums currently stored at LBNL?
- 3. What radioactive isotopes do the drums contain?
- 4. What is the radioactivity of each drum?
- 5. What are the hazardous constituents of the transuranic mixed waste?
- 6. What is the proposed location for the solidification of the liquid waste?

7. What is the proposed location for the neutralization of the corrosive mixed transuranic waste?

- 8. What permits will LBNL need to perform the above mentioned waste treatment?
- 9. Is this kind of waste treatment allowed under LBNL's HWHF's Part B. Permit?
- 10. Where did this waste originate at LBNL?
- 11. What are laws that govern the packaging and shipment of this waste?

We categorically object to any treatment, repackaging, opening etc. of any of these waste drums onsite at LBNL.

We request that the strictest laws be observed with respect to shipping protocols mandated by DOE and DOT, without any exemptions.

Conable, Sherry Page 1 of 3

Dear Mr Grim:

I would like to add the following comments to the ones below that I am submitting at the request of TriValley cares in Livermore - they are doing the most important and valuable work, and I thank then!

the proposed expansion at Livermore is frightening and truly hard to believe at this juncture in history - it is time for this nation to take responsibility for stopping the proliferation of weapons of all kinds, and especially WMD, and for beginning a true path of disarmament this proposal puts us in a position of great hypocrisy in the world community and stands in direct contradiction to the creative intention of the universe and the commitments we need to be making now to come into alignment with that intention that intention moves toward love and gentleness and reverence for all of life and for this planet itself, not toward destruction or the means to destroy and injure

I thank for your careful consideration and review of a proposal that should be abandoned

sincerely

sherry conable

Please consider this letter with my comments on the environmental and proliferation risks from proposed nuclear weapons development and new plutonium and tritium programs at the U.S. Department of Energy's (DOE) Lawrence Livermore National Laboratory (LLNL).

I write to you because the DOE has prepared a draft Site Wide Environmental Impact Statement (SWEIS) that proposes to ramp up nuclear weapons activities at the Livermore Lab in Northern California. Livermore Lab is working on the design of a new, high-yield nuclear bunker-buster, called the "Robust Nuclear Earth Penetrator," and I oppose its development. Additionally, I oppose the development of so-called "mini-nukes" and other new nuclear weapons concepts being researched at Livermore Lab.

Here are my comments on six dangerous new programs being proposed at Livermore Lab.

1. Storage of More Nuclear Materials: This plan will more than double the storage limit for plutonium at Livermore Lab from 1,540 pounds to 3,300 pounds. It would increase the radioactive tritium storage limit from 30 grams to 35 grams. I join California Peace Action and the Livermore-based Tri-Valley CAREs group in calling on DOE to de-inventory the plutonium and tritium stocks at Livermore Lab, not increase them.

2. Plutonium Atomic Vapor Laser Isotope Separation (AVLIS): This plan will revive a project that was canceled more than 10 years ago because it was dangerous and unnecessary. The project is Plutonium AVLIS. This is a scheme to heat and vaporize plutonium and then shoot multiple laser beams through the hot vapor to separate out

20/36.01

March 2005

2-81